



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/563,375

05/26/2006

Michel Toledano

40528u

4405

50438

7590

05/12/2011

JUNEAU PARTNERS

333 N Fairfax St.

Suite 305

ALEXANDRIA, VA 22314

EXAMINER

STEADMAN, DAVID J

ART UNIT

PAPER NUMBER

1656

MAIL DATE

DELIVERY MODE

05/12/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,375	<b>Applicant(s)</b> TOLEDANO ET AL.	
	<b>Examiner</b> DAVID J. STEADMAN	<b>Art Unit</b> 1656	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 26-68 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Status of the Application*

- [1] Claims 26-68 are pending in the application.
- [2] Applicant's preliminary amendment to the claims, filed on 5/26/06, is acknowledged. This listing of the claims replaces all prior versions and listings of the claims.
- [3] In order to perfect the requirements for a sequence listing, applicant is required to submit an amendment directing entry of the substitute sequence listing paper copy, filed on 4/19/10, into the application.

### *Election/Restriction*

- [4] Claim 36 link(s) inventions XI, XII, and XIII. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s), claim 36.
- [5] Claim 40 link(s) inventions XIV, XV, and XVI. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s), claim 40.
- [6] Claims 44-45 and 49-50 link(s) inventions XVII, XVIII, and XIX. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s), claims 44-45 and 49-50.
- [7] Claim 51 link(s) inventions XX, XXI, and XII. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s), claim 51.
- [8] Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending

Art Unit: 1656

from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104 **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

**[9]** Lack of unity is required under 35 U.S.C. 121 and 372. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

**Groups I-X**, claim(s) 26-35, drawn to the technical feature of a sulfiredoxin protein comprising SEQ ID NO:15 and a pharmaceutical composition. Group I recites SEQ ID NO:1. Group II recites SEQ ID NO:2. Group III recites SEQ ID NO:3. Group IV recites SEQ ID NO:4. Group V recites SEQ ID NO:5. Group VI recites SEQ ID NO:6. Group VII recites SEQ ID NO:7. Group VIII recites SEQ ID NO:8. Group IX recites SEQ ID NO:9. Group X recites SEQ ID NO:10. It is noted that claims 29-31 and 35 will be examined only to the extent the claims read on the elected subject matter.

**Group XI**, claim(s) 37, drawn to the technical feature of a method for screening for cancer by evaluating involvement of a Prx/Srx antioxidizing system.

**Group XII**, claim(s) 38, drawn to the technical feature of a method for screening for neurodegenerative disease by evaluating involvement of a Prx/Srx antioxidizing system.

**Group XIII**, claim(s) 39, drawn to the technical feature of a method for screening for aging by evaluating involvement of a Prx/Srx antioxidizing system.

**Group XIV**, claim(s) 41, drawn to the technical feature of a method for screening for cancer by genotyping of sulfiredoxin.

**Group XV**, claim(s) 42, drawn to the technical feature of a method for screening for neurodegenerative disease by genotyping of sulfiredoxin.

**Group XVI**, claim(s) 43, drawn to the technical feature of a method for screening for aging by genotyping of sulfiredoxin.

**Group XVII**, claim(s) 46, drawn to the technical feature of a method for screening for cancer by quantification of mRNA encoding sulfiredoxin.

**Group XVIII**, claim(s) 47, drawn to the technical feature of a method for screening for neurodegenerative disease by quantification of mRNA encoding sulfiredoxin.

**Group XIX**, claim(s) 48, drawn to the technical feature of a method for screening for aging by quantification of mRNA encoding sulfiredoxin.

**Group XX**, claim(s) 52, drawn to the technical feature of a method for screening for cancer by immunodetection.

**Group XXI**, claim(s) 53, drawn to the technical feature of a method for screening for neurodegenerative disease by immunodetection.

**Group XXII**, claim(s) 54, drawn to the technical feature of a method for screening for aging by immunodetection.

**Group XXIII**, claim(s) 55, drawn to the technical feature of a method for obtaining plants.

**Groups XXIV-XXXI**, claim(s) 56-59, drawn to the technical feature of a host cell. Group XXIV recites SEQ ID NO:1. Group XXV recites SEQ ID NO:2. Group XXVI recites SEQ ID NO:3. Group XXVII recites SEQ ID NO:5. Group XXVIII recites SEQ ID NO:6. Group XXIX recites SEQ ID NO:8. Group XXX recites SEQ ID NO:9. Group XXXI

Art Unit: 1656

recites SEQ ID NO:10. It is noted that claim 56 will be examined only to the extent the claim reads on the elected subject matter.

**Group XXXII**, claim(s) 60, drawn to the technical feature of a first method for screening for medicinal products.

**Group XXXIII**, claim(s) 61-62, drawn to the technical feature of a second method for screening for medicinal products.

**Group XXXIV**, claim(s) 63, drawn to the technical feature of a third method for screening for medicinal products.

**Group XXXV**, claim(s) 64-66, drawn to the technical feature of anti-Srx antibodies.

**Group XXXVI**, claim(s) 67, drawn to the technical feature of a method of reducing a product.

**Group XXXVII**, claim(s) 68, drawn to the technical feature of a method of synthesizing a product.

**[10]** Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

**[11]** The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention or species.

Art Unit: 1656

**[12]** Should applicant traverse on the ground that the inventions have unity of invention (37 CFR 1.475(a)), applicant must provide reasons in support thereof.

Applicant may submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case.

Where such evidence or admission is provided by applicant, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

**[13]** Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Reason(s) Supporting Lack of Unity***

**[14]** The inventions listed as Groups I-XXXVII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

**[15]** According to PCT Rule 13.2 unity of invention exists only when the shared same or corresponding special technical feature is a contribution over the prior art. The technical feature linking Groups I-XXXVII is a sulfiredoxin protein comprising SEQ ID NO:15. This technical feature is not a special technical feature as it does not make a contribution over the prior art in view of Henderson et al. (US Patent Application

Art Unit: 1656

Publication 2002/0172952 A1; cited in the IDS filed on 1/4/06), which, according to the corresponding written opinion for PCT/FR2004/001727, discloses a human polypeptide that is identical to SEQ ID NO:4 and comprises an FGGCHR motif.

***Notice of Potential Rejoinder***

**[16]** The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result**



Art Unit: 1656

**in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Steadman whose telephone number is 571-272-0942. The examiner can normally be reached on Mon to Fri, 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao, can be reached on 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/David J. Steadman/  
Primary Examiner, Art Unit 1656